IN THE CLAIMS

Please amend claims 1, 6, 8, 9, 13, 14, 18, 19, 21, 22, 25, 26, 29, 32, 39, 43, 46, 47, 49, 51, 52, and 53, as follows:

1. (Currently Amended) A method for use in re-establishing communication for a wireless communication device in a wireless communication network after a communication loss therebetween, the method comprising the acts of:

receiving an indication of the communication loss between the wireless device and the wireless network;

based on receiving the indication of the communication loss, adding an identifier of the wireless device to a list of ~~unavailable~~ wireless devices experiencing such communication losses in the wireless network; and

causing identifiers of the list to be broadcasted in the wireless network, where the identifier of the wireless device is for use in being identified by the wireless device upon recovery from the communication loss, to thereby cause the wireless device to transmit a control message which informs the wireless network of the presence and recovery of the wireless device from the communication loss.

2. (Original) The method of claim 1, further comprising the acts of:

receiving an indication that communication is re-established between the wireless device and the wireless network; and

based on receiving the indication that communication is re-established, removing the identifier of the wireless device from the list.

3. (Original) The method of claim 1, wherein the act of causing the identifiers of the list to be broadcasted comprises the further act of causing the identifiers of the list to be broadcasted on a regular basis.

4. (Original) The method of claim 1, wherein the act of causing the identifiers of the list to be broadcasted comprises the further act of causing the identifiers of the list to be broadcasted over a control channel of the wireless network.

5. (Original) The method of claim 1, comprising further the act of:

removing the identifier of the wireless device from the list after an expiration of a period of time.

6. (Currently Amended) The method of claim 1, comprising further the acts of:

in the wireless communication device:

after recovering from the communication loss, receiving signals from the wireless network;

decoding broadcasted identifiers of the list from the wireless network;

comparing each broadcasted identifier with an identifier of the wireless device; and

based on a match between a broadcasted identifier and the identifier of the wireless device, transmitting ~~a~~ the control message which informs the wireless network of the presence of the wireless device.

7. (Original) The method of claim 1, wherein the wireless network comprises a cellular telecommunications network.

8. (Currently Amended) In a wireless communication device, a method ~~of~~ for use in re-establishing communication with a wireless communication network after a communication loss therewith, the method comprising the acts of:

after recovering from the communication loss, decoding broadcasted identifiers of a list of ~~unavailable~~ wireless communication devices identified to have experienced such communication losses in the wireless network;

comparing each broadcasted identifier with an identifier of the wireless device; ~~and~~

based on a match between a broadcasted identifier and the identifier of the wireless device, transmitting a control message which informs the wireless network of the presence and recovery of the wireless device from the communication loss; and

refraining from transmitting the control message if none of the broadcasted identifiers match the identifier of the wireless device.

9. (Currently Amended) The method of claim 8, ~~comprising the further act of:~~

~~otherwise, normally refraining from transmitting the control message to the wireless network~~ wherein the control message is transmitted by the wireless device so that any pending messages in the network will be sent to the wireless device upon recovery from the communication loss.

10. (Original) The method of claim 8, wherein the act of decoding broadcasted identifiers comprises the further act of decoding the broadcasted identifiers over a control channel of the wireless network.

11. (Original) The method of claim 8, wherein the broadcasted identifiers comprise one of identification numbers and an IP addresses.

12. (Original) The method of claim 8, wherein the wireless device comprises a cellular mobile station.

13. (Currently Amended) A wireless communication device, comprising:

a receiver;

a transmitter;

an antenna coupled to the receiver and the transmitter;

the receiver and the transmitter being operative to communication through a wireless communication network;

one or more processors coupled to the receiver and the transmitter;

the one or more processors being operative to:

after the wireless device recovers from a communication loss with the wireless network, decode broadcasted identifiers of ~~unavailable~~ wireless communication devices identified to have experienced such communication losses in ~~a~~ the wireless ~~communication~~ network;

compare each broadcasted identifier with an identifier of the wireless device; ~~and~~

cause a control message which informs the wireless network of the presence and recovery of the wireless device from the communication loss to be transmitted through the transmitter, based on a match between a broadcasted identifier and the identifier of the wireless device; and

refrain from causing the control message to be transmitted through the transmitter if none of the broadcasted identifiers match the identifier of the wireless device.

14. (Currently Amended) The wireless communication device of claim 13, wherein ~~one or more processors are further operative to otherwise normally refrain from transmitting any control message to the wireless network~~ the control message is transmitted by the wireless device so that any pending messages in the network will be sent to the wireless device upon recovery from the communication loss.

15. (Original) The wireless communication device of claim 13, further comprising a cellular mobile station.

16. (Original) The wireless communication device of claim 13, wherein one or more processors are further operative to decode broadcasted identifiers over a control channel of the wireless network.

17. (Original) The wireless communication device of claim 13, wherein the broadcasted identifiers comprise one of identification numbers and an IP addresses.

18. (Currently Amended) In a wireless communication device, a method ~~of~~ for use in re-establishing communication with a wireless communication network after a loss of communication therewith, the method comprising the acts of:

after recovering from the communication loss, monitoring a control channel of the wireless network;

decoding broadcasted identifiers of ~~unavailable~~ wireless communication devices identified in the wireless network to have experienced such communication losses in the wireless network;

comparing each broadcasted identifier with an identifier of the wireless device; ~~and~~

based on a match between a broadcasted identifier and the identifier of the wireless device, transmitting a control message which informs the ~~wireless~~ network of the presence and recovery of the wireless device from the communication losses, so that any pending messages in the network will be sent to the wireless device; and

~~otherwise, normally~~ refraining from transmitting the control message ~~to the wireless network~~ if none of the broadcasted identifiers match the identifier of the wireless device.

19. (Currently Amended) A cellular telecommunications system comprising:

a cellular network infrastructure ~~which~~ being operative to:

~~receives~~ receive indications of communication losses with one or more cellular mobile stations;

~~adds~~ add identifiers of the one or more cellular mobile stations associated with communication losses to a list;

~~causes~~ cause the identifiers in list to be broadcasted through the cellular network infrastructure on a regular basis;

each of the one or more cellular mobile stations being operative to:

after recovering from a communication loss, decode the broadcasted identifiers from the cellular network infrastructure;

compare each broadcasted identifier with an identifier of the cellular mobile station; and

cause a control message which informs the ~~cellular~~ network ~~infrastructure~~ of the presence and recovery of the cellular mobile station from the communication loss to be transmitted based on a match between a broadcasted identifier and the identifier of the cellular mobile station.

20. (Original) The cellular telecommunications network of claim 19, wherein each cellular mobile station is further operative to normally refrain from transmitting any control message to the cellular network infrastructure, unless a match exists between a broadcasted identifier and the identifier of the cellular mobile station.

21. (Currently Amended) A method for use in re-establishing a data connection between an application server and a wireless communication device operating in a wireless communication network, the method comprising the acts of:

storing an identifier of the application server in association with an identifier of the wireless device;

receiving an indication of a communication loss between the wireless device and the wireless network which causes the data connection to be terminated;

after the communication loss, receiving an indication that communication is re-established between the wireless device and the wireless network; and

providing the stored association of identifiers of the application server and the wireless device to assist in re-establishing ~~a~~ the data connection between the wireless device and the application server.

22. (Currently Amended) The method of claim 21, wherein the act of storing the identifier is performed ~~after~~ in response to the act of receiving the indication of the communication loss.

23. (Original) The method of claim 21, wherein the act of storing the identifier is performed prior to the act of receiving the indication of the communication loss.

24. (Original) The method of claim 21, wherein the act of storing the identifier of the application server comprises the further act of storing an application server name of the application server.

25. (Currently Amended) The method of claim 21, comprising the further act of:

using the identifier of the application server, contacting the application server to ~~assist in re-establishing~~ cause the connection to be re-established.

26. (Currently Amended) A method ~~of~~ for use in re-establishing data communication over a data connection between an application server and a wireless communication device ~~from~~ after a communication loss between the wireless device and a wireless communication network which causes the data connection to be terminated, the method comprising the acts of:

storing identifiers of application servers in association with identifiers of wireless communication devices between which data communications over data connections were established or pending; and

after ~~communication is re-established between a wireless communication device and a wireless communication network~~ the wireless device recovers from the communication loss:

assisting in re-establishing ~~a~~ the data connection between ~~an~~ the application server and the wireless device with use of a stored association between an identifier of the application server and an identifier of the wireless device.

27. (Original) The method of claim 26, comprising the further act of:

using the identifier of the application server to contact the application server to assist in re-establishing the connection.

28. (Original) The method of claim 26, wherein the identifier of the application server comprises an application server name.

29. (Currently Amended) A server, comprising:

a data storage medium;

computer instructions stored on the data storage medium;

a computer processor which executes the computer instructions for use in re-establishing data communication over a data connection between an application server and a wireless communication device after a communication loss between the wireless device and a wireless communication network which causes the data connection to be terminated, by performing the following acts of:

storing identifiers of application servers in association with identifiers of wireless communication devices between which data communications over data connections were established or pending; and

after the wireless device recovers from the communication loss, providing an identifier of ~~an~~ the application server to assist in re-establishing ~~a~~ the data connection between the application server and ~~a~~ the wireless ~~communication~~

device ~~after communication is re-established between the wireless device and a wireless communication network~~.

30. (Original) The server of claim 29, wherein the computer processor which executes the computer instructions for providing the identifier is used for contacting the application server to re-establish the connection between the application server and the wireless device.

31. (Original) The server of claim 29, wherein the computer processor which executes the computer instructions is also used for contacting the application server with use of the identifier to further assist in re-establishing data communication between the application server and the wireless device.

32. (Currently Amended) A method to facilitate a re-establishing of communication over a data connection between a wireless communication device and an application server, the method comprising the acts of:

after a communication loss between the wireless device and a wireless communication network which causes the data connection to be terminated, receiving a plurality of connection requests from the application server ~~to~~ intended for receipt by the wireless device for re-establishing the data connection ~~after a communication loss between the wireless device and a wireless communication network~~; and

limiting a number or a rate of the connection requests ~~from the application server~~ received by the wireless device during the communication loss between the wireless device and the wireless network.

33. (Original) The method of claim 32, wherein the act of limiting the number or the rate of the connection requests comprises the further act of performing a rate limiting process with the connection requests from the application server.

34. (Original) The method of claim 32, wherein the act of limiting the number or the rate of the connection requests comprises the further act of performing a traffic policing process with the connection requests from the application server.

35. (Original) The method of claim 32, wherein the application server has user information which is pushed to the wireless device.

36. (Original) The method of claim 32, wherein the application server has an e-mail application for use with the wireless device.

37. (Original) The method of claim 32, wherein the wireless device comprises a cellular mobile station.

38. (Original) The method of claim 32, wherein the number or the rate is determined based on an Access Point Name (APN) for the wireless device.

39. (Currently Amended) A server for facilitating a re-establishment of data communications over a data connection between an application server and a wireless communication device, the server comprising:

a data storage medium;

computer instructions stored on the data storage medium;

a computer processor of the server which executes the computer instructions for:

after communication loss between the wireless device and a wireless communication network which causes the data connection to be terminated, receiving a plurality of connection requests from the application server intended for receipt by the wireless device for re-establishing the data connection ~~after communication loss between the wireless device and a wireless communication network~~; and

limiting a number or a rate of the connection requests from the application server received by the wireless device during the communication loss between the wireless device and the wireless network.

40. (Original) The server of claim 39, wherein the computer processor which executes the computer instructions for limiting the number or the rate of the connection requests performs a rate limiting technique.

41. (Original) The server of claim 39, wherein the computer processor which executes the computer instructions for limiting the number or the rate of the connection requests performs a traffic policing technique.

42. (Original) The server of claim 39, wherein the server comprises an Access Point Name (APN) server.

43. (Currently Amended) In a cellular mobile station, a method of re-establishing communication comprising acts of:

operating in a cellular telecommunications network to receive information which is pushed via the cellular network;

detecting that a signal strength of signals received from the cellular ~~telecommunications~~ network is below a predetermined threshold;

based on detecting that the signal strength of the signals received from the cellular network is below the predetermined threshold, scanning for signals from one or more additional cellular telecommunications networks; ~~and~~

~~while~~ in response to signals from one or more additional cellular telecommunications networks ~~are~~ being inadequate for communication, transmitting on a regular basis a control message which informs the cellular ~~telecommunications~~ network of the presence of the cellular mobile station; and

normally refraining from transmitting control messages when the signals from the one or more additional cellular telecommunication networks are adequate for communication.

44. (Original) The method of claim 43, comprising the further acts of:

detecting that the signal strength of the signals is above the predetermined threshold; and

based on detecting that the signal strength is above the predetermined threshold, transmitting the control message to the cellular telecommunications network.

45. (Original) The method of claim 43, further comprising:

wherein the act of operating in the cellular telecommunications network comprises the further act of receiving e-mail information pushed from the cellular telecommunications network.

46. (Currently Amended) A cellular mobile station, comprising:

a receiver;

a transmitter;

an antenna coupled to the receiver and the transmitter;

one or more processors coupled to the receiver and the transmitter which operate to receive information which is pushed from a cellular telecommunications network;

the one or more processors being operative to detect that a signal strength of signals received through the receiver from ~~a~~ the cellular ~~telecommunications~~ network is below a predetermined threshold;

the one or more processors being further operative to, based on detecting that the signal strength is below the predetermined threshold, scan for signals from one or more additional cellular ~~telecommunications~~ networks with use of the receiver; ~~and~~

the one or more processors being further operative to, ~~while~~ in response to signals from one or more additional cellular ~~telecommunications~~ networks ~~are~~ being inadequate

for communication, cause a control message which informs the cellular ~~telecommunications~~ network of the presence of the cellular mobile station to be transmitted through the transmitter on a regular basis; and

the one or more processors being further operative to normally refrain from causing control messages to be transmitted while the signals from the one or more additional cellular networks are adequate for communication.

47. (Currently Amended) In a wireless communication device, a method of operating to re-establish communication between the wireless device and a wireless communication network comprising the acts of:

receiving radio frequency (RF) signals from a wireless communication network during communication therewith;

detecting that a signal strength of the RF signals is no longer adequate for communication;

scanning to identify a new RF signal for communication;

~~if~~ in response to failing to identify a new RF signal ~~is not identified by~~ for communication during the ~~act of~~ scanning, periodically scanning to identify a new RF signal for communication; ~~and~~

~~if~~ in response to identifying a new RF signal ~~is identified~~ for communication during the scanning, transmitting a control message to re-establish the communication; and

normally refraining from transmitting such control messages until the new RF signal is identified from the scanning.

48. (Original) The method of claim 47, wherein the act of detecting comprises identifying that a received signal strength indicator (RSSI) is below a predetermined threshold.

49. (Currently Amended) The method of claim 47, ~~comprising the further act of:~~

~~normally refraining from transmitting the control message until a new RF signal is identified~~ wherein the control message informs the network of the presence of the wireless device to re-establish the communication.

50. (Original) The method of claim 47, comprising the further act of:

entering into a sleep mode between periods of the periodic scanning.

51. (Currently Amended) The method of claim 47, ~~wherein the control message comprises an update message~~ further comprising:

operating in the wireless network to receive information which is pushed via the wireless network.

52. (Currently Amended) A wireless communication device, comprising:

a receiver which receives radio frequency (RF) signals from a wireless communication network during wireless communication therewith;

a signal strength detector which detects a signal strength of the RF signals;

a transmitter;

one or more processors coupled to the receiver and the transmitter;

the one or more processor being operative to:

determine that the RF signals are no longer adequate for communication based on the signal strength detector;

in response to the determination, cause the wireless device to enter into a first mode of scanning to identify a new RF signal for communication;

in response to failing to identify a new RF signal in the first mode of scanning, cause the wireless device to enter into a second mode of periodic scanning to identify a new RF signal for communication, ~~if a new RF signal is not identified in the first mode of scanning~~; ~~and~~

in response to identifying a new RF signal for communication during the scanning, cause the transmitter to transmit a control message to re-establish communications ~~if a new RF signal is identified by the one or more processors;~~ and

normally refrain from causing the transmitter to transmit such control messages until the new RF signal is identified from the scanning.

53. (Currently Amended) The wireless communication device of claim 52, ~~wherein the one or more processors normally refrain from causing the transmitter to transmit the control message until a new RF signal is identified~~ wherein the one or more processors are further operative to:

operate the wireless device in the wireless network to receive information which is pushed via the wireless network.

54. (Original) The wireless communication device of claim 52, wherein the one or more processors cause the wireless device to enter into a sleep mode of operation between periods of the periodic scanning in the second mode of periodic scanning.